

CONTENTS OF ECOLOGICAL MODELLING, VOL. 49

VOL. 49 NOS 1/2

DECEMBER 1989

Application of a guaranteed regression model to trophic interaction in an aquatic system V. Křivan and J. Sed'a (České Budějovice, Czechoslovakia)	1
Simulation modelling of the coastal waters pollution from agricultural watershed V. Krysanova, A. Meiner (Tallinn, U.S.S.R.), J. Roosaare (Tartu, U.S.S.R.) and A. Vasilyev (Tallinn, U.S.S.R.)	7
Simulating the indirect effects of power plant entrainment losses on an estuarine ecosystem J.K. Summers (Columbia, MD, U.S.A.)	31
Simulation modelling of the effects of oil spills on population dynamics of northern fur seals M. Reed, D.P. French (Narragansett, RI, U.S.A.), J. Calambokidis and J.C. Cubbage (Olympia, WA, U.S.A.)	49
Relationship between radiation interception and photosynthesis in forest canopies: effect of stand structure and latitude P. Oker-Blom (Helsinki, Finland), T. Pukkala and T. Kuuluvainen (Joensuu, Finland)	73
Simulation of within-tree and between-tree shading of direct radiation in a forest canopy: effect of crown shape and sun elevation T. Kuuluvainen and T. Pukkala (Joensuu, Finland)	89
Model of the seasonal and perennial carbon dynamics in deciduous-type forests controlled by climatic variables A. Janecek, G. Benderoth, M.K.B. Lüdeke, J. Kindermann and G.H. Kohlmaier (Frankfurt, Federal Republic of Germany)	101
Catastrophe theory in ecology: a critical review and an example of the butterfly catastrophe C. Loehle (Aiken, SC, U.S.A.)	125

VOL. 49 NOS. 3/4

JANUARY 1990

<i>Acanthaster planci</i> outbreak initiation: a starfish-coral site model R.E. Reichelt (Townsville, Qld., Australia), W. Greve, (Hamburg, Federal Republic of Germany), R.H. Bradbury and P.J. Moran (Townsville, Qld., Australia)	153
Behavior of a multivariate algorithm for ecological edge detection J.W. Brunt and W. Conley (Las Cruces, NM, U.S.A.)	179
Response of alpine tundra to a changing climate: a hierarchical simulation model W.E. Grant (College Station, TX, U.S.A.) and N.R. French (Boulder, CO, U.S.A.) . .	205
A gap dynamics simulation model of succession in a semiarid grassland D.P. Coffin and W.K. Lauenroth (Fort Collins, CO, U.S.A.)	229
Deforestation and diversity of life zones in the Brazilian Amazon: a map analysis P. Kangas (Ypsilanti, MI, U.S.A.)	267

Landscape fragmentation and dispersal in a model of riparian forest dynamics J.S. Hanson, G.P. Malanson and M.P. Armstrong (Iowa City, IA, U.S.A.)	277
An approximate formula for the daily photoproduction of forest tree canopies N. Trost (Kassel, Federal Republic of Germany)	297
Author Index	311

